TJM/MBS/ecl

DOCKET NO.: 3558.1000-001

11/02/04

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

10/825,082

Group Art Unit: 3752

Filed:

April 14, 2004

Examiner: Not assigned

Confirmation No.:

7176

Title:

METHOD AND APPARATUS FOR MEASURING ACTUATION OF SPRAY

DEVICES

CERTIFICATE OF MAILING OR TRANSMISSION

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NOV. 5, 2004 Date

Dino J. Farina and Donald C. Swavely

Typed or printed name of person signing certificate

Signature

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

T	his	Information	Disclosure	Statement i	s submitted:
•	٠,	1 20	OED 1 100	· \	

under 37 CFR 1.129(a), or ll

(First/Second submission after Final Rejection)

[X]under 37 CFR 1.97(b), or

> (Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).

under 37 CFR 1.97(c) together with either:

a Statement under 37 CFR 1.97(e), as checked below, or

a \$180.00 fee under 37 CFR 1.17(p), or

(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)

[] under 37 CFR 1.97(d) together with:

> a Statement under 37 CFR 1.97(e), as checked below, and

a \$180.00 fee under 37 CFR 1.17(p), or

(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)

under 37 CFR 1.97(i):

Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.

(Filed after payment of issue fee)

Statem	ent Unc	<u>ter 37 C</u>	FR 1.97(e)	
[]	any co	mmunic	information contained in this Information Disclosure Statement was first cited in cation from a foreign patent office in a counterpart foreign application not more on the filing of this Information Disclosure Statement; or	
[]	knowle in the i	inication designs and the contract of the cont	formation contained in this Information Disclosure Statement was cited in a n from a foreign patent office in a counterpart foreign application, and, to the the undersigned, after making reasonable inquiry, no item of information containe tion disclosure statement was known to any individual designated in 37 CFR han three months prior to the filing of this Information Disclosure Statement.	Ċ
Statem	ent Und	ler 37 C	(Patent Term Adjustment) Applies to original applications (other than design) filed on or after May 29, 200	0
[]	commitwas no	unicatio t receiv	nformation contained in the Information Disclosure Statement was cited in a n from a foreign patent office in a counterpart application and this communication ed by any individual designated in § 1.56(c) more than thirty days prior to the formation Disclosure Statement.	ì
[X]	Enclos	ed here	with is form PTO-1449:	
	[X]	Copies	of the cited non-patent references are enclosed.	
		[X]	Since this application was filed after June 30, 2003, copies of issued U.S. patents and published U.S. applications are not required and are not being provided.	
	[]	Applic	of the cited references are enclosed except those entered in prior application, U.S ation No. [], to which priority under 35 U.S.C. 120 is claimed. [The earlier ation contains copies of the cited references.]	•
	[X]	The lis	ted references were cited in the enclosed International Search Report in a rpart foreign application.	
	[]	The "c under	oncise explanation" requirement (non-English references) for reference(s) [37 CFR 1.98(a)(3) is satisfied by:]
		[]	the explanation provided on the attached sheet.	
		[]	the explanation provided in the Specification.	
		[]	submission of the enclosed International Search Report.	
		[]	submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.	
		ſΊ	the enclosed English language abstract.	

[]	Applic	cant requests that the following r	non-published pending appli	cations be considered:
Examiner's Initials	.			
		U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []
		U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []
	-	U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []
		Examiner	Date	_
	[]	A copy of each above-cited app	olication, including the curre	nt claims, is enclosed.
	[]	A copy of each above-cited app those entered in prior application 35 U.S.C. 120 is claimed.	plication, including the curre on, U.S. Application No. [nt claims, is enclosed, except], to which priority under
The E	xamine nces we	r is requested to return a copy of re considered with the next office	the above list of pending ap se communication.	plications indicating which
It is re	quested	I that the information disclosed h	nerein be made of record in t	his application.
Metho	od of pa	yment:		
[]		ck for the fee noted above is encorpanying Reply. A copy of this S		cluded in the check with the
[]	Please enclos	c charge Deposit Account 08-038 sed.	30 in the amount of \$[. A copy of this Statement is
[X]	Please	charge any deficiency in fees ar	nd credit any overpayment to	Deposit Account 08-0380.
		I	Respectfully submitted,	
		I	HAMILTON, BROOK, SMI	TH & REYNOLDS, P.C.
		I	Mark B. Solomon Registration No.: 44,348 Telephone: (978) 341-0036 Facsimile: (978) 341-0136	

Concord, MA 01742-9133 Dated: 11/5/04

FIRST NAMED INVENTOR Dino J. Farina		FILING DATE April 14, 2004	
EXAMINER Not assigned			GROUP 3752
	3558.1000-001 FIRST NAMED INVENTOR Dino J. Farina EXAMINER	3558.1000-001 10/2 FIRST NAMED INVENTOR Dino J. Farina EXAMINER CONF	3558.1000-001 10/825,082 FIRST NAMED INVENTOR Dino J. Farina FILING DATE April 14, 20 EXAMINER CONFIRMATION NO.

TENTE	DALLEMAR	U.S.	. PATENT DOCUMENTS	
EXAM- INER INI- TIAL	REF. NO.	DOCUMENT NUMBER Number-Kind Code (if known)	ISSUE DATE / PUBLICATION DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT
	AA	Re 34,910	04/18/1995	Funkenbusch et al.
	AB	4,357,670	11/02/1982	McFarlane
	AC	4,415,265	11/15/1983	Campillo et al.
	AD	4,614,300	09/30/1986	Falcoff
	AE	4,965,841	10/23/1990	Kaneko et al.
	AF	4,992,952	02/12/1991	Sasaki
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	AI	5,561,527	10/01/1996	Krone-Schmidt et al.
	ΔĴ	5,879,713	03/09/1999	Roth et al.
	AK	6,149,071	11/21/2001	MacCallumMhor et al.
	AA2	6,193,936 B1	02/23/2001	Gardner et al.
	AB2	6,256,597 B1	07/03/2001	Wang et al.
	AC2	6,508,112 B1	01/21/2003	Verhoeven
	AD2			
	AE2			
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	AG2			
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EXAMINER	DATE CONSIDERED

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INFORMATION DISCLOSURE CITATION IN AN APPLICATION

October 18, 2004

(Use several sheets if necessary)

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ATTORNEY DOCKET NO. 3558.1000-001	APPLICATION NO. 10/825,082	
FIRST NAMED INVENTOR Dino J. Farina	FILING DATE April 14, 20	004
EXAMINER Not assigned	CONFIRMATION NO.	GROUP 3752

	F	OREIGN PATENT D	OCUMENTS	
	DOCUMENT NUMBER Country Code-Number-Kind Code (if known)	DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	TRANSLATION YES NO
AL	WO 03/000429 A2	01/03/2003	Image Therm Engineering	
AM				
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EXAMINER	DATE CONSIDERED

₱TÖ-1449 REPRODUCED			APPLICATION NO. 10/825,082	
INFORMATION DISCLOSURE CITATION IN AN APPLICATION	FIRST NAMED INVENTOR Dino J. Farina		FILING DATE April 14, 2004	
October 18, 2004 (Use several sheets if necessary)	EXAMINER Not assigned	CONFI 7176	RMATION NO.	GROUP 3752

	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
AR	Dvorak, P., "How to See Aerosol Spray Patterns and Plumes," <i>Machine Design</i> , 72(13): 122 (2000, July 6).
AS	Badreldin, Amira M., "Real-Time Analysis of Fuel Spray Images," IEEE, pp. 622-624 (1987).
AT	Lopera, J. F. G., et al., "Improved Entropic Edge-Detection." Paper supported by grant MAR97-0464-C04-02 of Spanish Government. No date given.
AU	Pastor, J. V., et al., "Analysis Methodology of Diesel Spray and Flame by Means of In-Cylinder Endoscopic Imaging," (The Institution of Electrical Engineers). Savoy Place, London: IEE (2000).
AV	Sellens, Rick and Deljouravesh, Rama, "Non-Orthogonal Optical Spray Pattern Analysis," Ninth International Symposium on Applications of Laser Techniques to Fluid Mechanics, Lisbon, Portugal, July 1998.
AW	Sankar, S.V., et al., "Time-Resolved Measurement of Liquid Mass Distribution in a Fuel Injector Spray Using an Optical Patternator," Institute for Liquid Atomization and Spray Systems, ILASS Americas '97, pp. 266-270, Ottawa, ON, Canada, May 18-21, 1997.
AX	Wang, G., et al., "An Optical Spray Pattern Analyzer," Institute for Liquid Atomization and Spray Systems, ILASS Americas '97, pp. 261-265, Ottawa, ON, Canada, May 18-21, 1997.
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EXAMINER	DATE CONSIDERED